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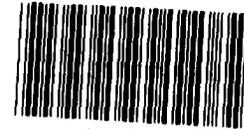
COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

*Wax*

B-197814

June 27, 1980

The Honorable Max Baucus, Chairman  
Subcommittee on Limitations of  
Contracted and Delegated Authority  
Committee on the Judiciary  
United States Senate



112893

Dear Mr. Chairman:

Subject: [GSA's Planned Procurement of a Consolidated Telephone System for the Washington, D.C., Area] (LCD-80-72)

In your July 10, 1979, letter, you asked us to review the General Services Administration's (GSA's) planned replacement of existing multiple telephone systems, serving most Federal civil organizations in the Washington, D.C., metropolitan area, with a single consolidated system. The replacement system was to be an interim measure while GSA completed plans for a competitively procured follow-on system that would satisfy the Government's long-term needs. (See enc. I.)

You asked us to address the following questions:

- Have other elements within GSA disputed the procurement policy being followed? If so, what were the specific objections and how have such disagreements been addressed?
- Is the procurement being investigated by any entity within or outside GSA?
- Is sole-source procurement of such a contract in the best interest of the Federal Government?
- Does the size of the project make it fall under the provisions of Office of Management and Budget (OMB) Circular A-109?

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--If the provisions of Circular A-109 apply, are they being followed? And if not, why not?

--Has there been any competition for this contract?

In January 1980 the Administrator of General Services terminated the interim and follow-on systems planning and directed that a new plan be developed. The Administrator stated that the need to replace the existing systems had not been adequately established and the proposed sole-source procurement to the serving telephone company had not been justified.

We believe GSA's action to terminate its planning is an appropriate course of action because the interim system may not have satisfied users' needs or provided economies to the Government. However, we do believe GSA's preliminary study is a significant step in the right direction because it identifies a potential need for enhanced telephone services and potential for economies through consolidation. As such, it demonstrates that more comprehensive work is needed to identify potential system(s) parameters--in such terms as subgeographic areas, similarities of current and future user needs, and communities of interest--that are in the Government's best interest. This work can be used to develop a long-range comprehensive plan on which to base competitive procurement for a local telephone system(s) in the Washington, D.C., metropolitan area.

Answers to your specific questions are discussed below.

HAVE OTHER ELEMENTS WITHIN GSA DISPUTED  
THE PROCUREMENT POLICY BEING FOLLOWED?  
IF SO, WHAT WERE THE SPECIFIC OBJECTIONS  
AND HOW HAVE SUCH DISAGREEMENTS BEEN ADDRESSED?

Several organizations, internal and external to GSA, did express a number of concerns regarding GSA's actions and plans for acquiring the interim and follow-on systems. These concerns generally can be categorized into whether

--the Federal civil organizations' needs have been adequately identified and whether the interim system will meet these needs,

--costs can be adequately identified for performing cost/benefit analyses for the interim system,

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--the policies expressed in OMB Circular A-109 will be applied, and

--competition for the procurement of the follow-on system will be compromised by establishing an interim system.

Generally, the above concerns were based on GSA's draft planning documents. Therefore, we did not determine what specific actions, if any, GSA had taken as a result of the expressed concerns.

Our independent review of GSA's actions and plans performed in response to your questions basically addressed the above concerns.

IS ANY ENTITY WITHIN OR OUTSIDE GSA INVESTIGATING THIS PROCUREMENT?

We found no indications that an investigation had been internally conducted of GSA's planning for the interim system procurement. Externally, the Department of Commerce's National Telecommunications and Information Administration (NTIA) performed a study of GSA's planning, prepared a report entitled "METREX System Review," and obtained proprietary information clearance for the report from the telephone company. NTIA's efforts were concurrent with our review; therefore, we have not evaluated or incorporated its information in this report, particularly since the procurement was terminated at the time we received NTIA's final report. Also, for this same reason, we have not expressed any position concerning NTIA's report, but we have noted that NTIA's position was adverse to the program as planned.

IS SOLE-SOURCE PROCUREMENT OF SUCH A CONTRACT IN THE BEST INTEREST OF THE FEDERAL GOVERNMENT?

GSA performed technical and economic analyses for the interim system. In our opinion, these efforts did not clearly demonstrate that any procurement of the proposed system--competitive or sole-source--would or would not have been in the Government's best interest. However, these analyses identify a potential need for enhanced telephone services and a potential for economies through consolidation.

GSA viewed the existing systems and trend toward multiple enhanced systems procured by individual agencies as being

outdated (e.g., lacking advanced service features 1/). GSA also viewed the systems as inefficient and costly to operate (e.g., incurring more message unit charges 2/ than necessary for interagency calls).

GSA recognized in 1974 that some agencies were beginning to need more advanced telephone services. Therefore, GSA requested that the serving telephone company review the requirements for a replacement system. The telephone company submitted proposals for a new consolidated system in 1975 and 1976, but GSA rejected both proposals on the basis of costs. In 1978 the telephone company submitted a revised proposal for replacing existing Federal systems with a consolidated system at lower costs than prior proposals. This revised proposal became GSA's basis for performing its technical and economic analyses.

### Technical analysis

GSA did not have all the information necessary for performing a detailed study of the Washington, D.C., metropolitan area. Also, neither GSA nor any other Government organization has established a single consolidated local telephone data base that includes all Federal civil organizations within this area.

GSA obtained some information by questionnaires and discussions, but these did not provide sufficient information for a detailed study. The questionnaires stated that certain service features would be included in the new services and requested that each organization provide certain additional information. For instance, this information was to include the current number and the projected growth, through 1983, of main stations 3/ and extensions. In addition, each organization was to indicate its willingness to participate in the new services if the costs were less than, the same as, and 10 percent greater than present costs.

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1/Service feature--an operation, such as placing a call without operator assistance, offered by the telephone companies as standard and optional attractions to their customers.

2/Message unit charge--for the purpose of this report, a charge for each local call placed in the Washington, D.C., metropolitan area, regardless of the length of conversation.

3/Main station--a telephone instrument or other terminal device on a circuit having an assigned telephone number.

GSA distributed the questionnaire to 37 Federal civil organizations, including major Departments, and received 41 responses from these and other Federal civil organizations. The responses were furnished to GSA on an organization-wide basis. GSA did not request, and the responding agencies did not provide, information by office and location within the metropolitan area, on their users' routine and emergency needs, the reliability necessary, or the time frame for fulfilling specific needs. GSA's analysis of the responses indicated a greater concern over costs than in satisfying valid operational requirements--36 organizations indicated interest in participating in the interim system if the costs were less than their present costs; 31 organizations indicated interest if the costs remained the same as their present costs; while only 15 organizations indicated interest if the costs were 10 percent higher than their current system costs.

The questionnaire responses and some discussions concerning these responses were the extent of GSA's efforts to identify or obtain users' needs and requirements for the interim consolidated system. Thus, GSA could not have been fully informed on whether the planned interim system services would fall short of, meet, or exceed users' needs.

GSA was aware that the questionnaire responses and discussions lacked detailed information. However, it had plans to start identifying the precise user needs and requirements for the planned follow-on, competitively procured system.

#### Economic analyses

GSA estimated the annual costs for continuing the existing systems and for various interim system alternatives. The interim system alternatives were expressed in terms of the extent a universe--total main stations and extensions--would be served by the single-line concept 1/ and main stations. The alternatives used by GSA were

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1/Single-line concept--concept where each telephone instrument or other terminal device can be accessed only by one assigned telephone number. Therefore, these devices are not normally equipped with push buttons.

- 25 percent single-line/75 percent lines with key equipment 1/ and 70 percent main stations/30 percent extensions,
- 50 percent single-line/50 percent lines with key equipment and 70 percent main stations/30 percent extensions, and
- 75 percent single-line/25 percent lines with key equipment and 77 percent main stations/23 percent extensions.

GSA's estimated costs for the existing systems only included operating costs; whereas, those for the interim system included the amortization of conversion and installation charges, operating costs for the unconverted portions of the existing systems, and operating costs associated with the interim system. Comparison between these estimated annual costs (in 1978 constant dollars) for 1980 through 1989 is shown in enclosure II.

OMB Circular A-94 sets forth a policy that prescribes the use of a discount rate in calculating the present-value costs and benefits of programs extending over 3 years or more. GSA did not compute the present-value costs of the three interim system alternatives and of the existing systems. Instead, GSA used an alternative procedure that it believed would have produced acceptable results. However, GSA did not appropriately apply the methodology. For example, the amortization period should have extended over the expected life of the system and been calculated for each conversion phase.

In our analysis, we chose to use the present-value approach. To adjust GSA's 1978 constant year dollars to reflect their present values, a significant change is required. This change is necessary for adjusting the interim system's installation and conversion costs, which were amortized over a 3-year period, to the year of the expected expenditure and to eliminate a 10-percent annual interest rate applied to conversion costs during the amortization period. The adjusted undiscounted costs (in 1978 constant dollars) are shown in enclosure III. These costs were discounted, using the average 1978 interest rate of 8 percent applicable to long-term Treasury obligations, to determine their present values in 1978 dollars. (See encs. III and IV.)

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1/Key equipment--a telephone instrument or terminal device equipped with push buttons for accessing multiple circuits. Each circuit is assigned a different telephone number.

Our recomputation of estimated cumulative cost differences between existing systems and the interim system for the 1980-89 period ranged from \$2.2 to \$43 million, after including conversion and installation costs ranging from \$2.9 to \$4.6 million.

According to GSA, the bulk of the cost difference would result from the removal of key equipment when main stations and extensions are installed under the single-line concept. Also, further cost reductions would be achieved as a result of the reduced costs of relocating these main stations and extensions.

Potential for differing economic results

Possibly, GSA's estimates would have differed from actual experience for a variety of reasons. We did not estimate the cost impact for these reasons because pertinent information was not readily available. Some of the reasons for the differing economic results are the

- unknown degree of acceptance for the single-line concept;
- inconsistent application of installation costs to the growth estimated for the existing and interim systems;
- differences in the application of interim system costs because GSA's assumption for starting payment of the new system costs differed from telephone company practices;
- exclusion of employee training costs;
- differences in the estimated duration of the implementation period used in GSA's cost analyses and planning document;
- possible changes in administrative procedures (direct ordering and billing) and operations (increases to the number and locations of operator consoles) being considered by GSA, but not economically evaluated in its study; and
- possible changes to proposed pricing.

For example, GSA's analyses clearly demonstrated that the achievement of any savings and the extent of such potential

savings were predominantly affected by the degree of acceptance for the single-line concept. In this regard, GSA believes that it has the authority to enforce the single-line concept but admits that the concept would have been successful only if a total commitment to it was made by the Office of Management and Budget, GSA officials, and using organizations served. GSA was well aware of this situation and had planned to issue regulations setting forth specific requirements for the single-line concept.

We believe GSA would have encountered difficulty in gaining acceptance from agencies for the implementation of its regulations. Even though the questionnaire responses indicated that 26 Federal organizations would support regulations requiring use of the concept, many organizations stated that the agency head must retain the authority over the use of the single-line concept. Only 15 of the 26 organizations indicated their interest for participating in the interim system if the costs escalated 10 percent. Also, GSA had not conducted a representative study to estimate the degree to which each agency would have been willing to adopt the single-line concept in the Washington, D.C., area.

GSA was aware of the extent six agencies with enhanced systems had converted (6 to 95 percent single-line) to the single-line concept. Managers of three existing enhanced systems in the metropolitan area advised us that their current estimated achievement of the single-line concept was as follows:

	<u>Percent single-line</u>
Department of Commerce	20 to 30
Department of Energy (Germantown)	95
Department of the Treasury	20

As shown, the achievement of the single-line concept on one enhanced system exceeds the levels included in GSA's cost analyses; whereas, the achievement on the other two systems is about equal to or less than the minimum level used by GSA. Thus, we believe the degree of actual acceptance for the single-line concept is not known.

Impact of termination liabilities  
not fully determined

GSA did not reflect any termination liabilities <sup>1/</sup> in its estimated costs and savings. The telephone company proposed to waive the termination liabilities for the existing systems when converting to the interim system. However, continuing the existing systems or converting to the interim system could result in termination liabilities (if not waived) to the Government when a competitively procured, follow-on system is acquired.

In our opinion, the differences between the estimated termination liabilities for the existing and interim systems should be appropriately reflected in calculating the savings or loss from the interim system. This would assist in selecting the best long-range economic alternative for the Government, whether or not such termination liabilities are waived.

DOES THE SIZE OF THIS PROJECT MAKE IT FALL  
UNDER THE PROVISIONS OF CIRCULAR A-109?

OMB Circular A-109 on major systems acquisitions did apply to the planned acquisition of an interim system. The estimated discounted costs, ranging from \$27 to \$32 million in the first year after full implementation of the interim system, would exceed the \$25 million life-cycle threshold established by GSA for defining a major system under the the circular. Also, according to GSA, the proposed interim system would have met the other parts of OMB's A-109 criteria because it is needed to ensure reliable, economic, and efficient telecommunications service in the Washington, D.C., metropolitan area.

IF THE PROVISISONS OF OMB CIRCULAR A-109  
APPLY, ARE THEY BEING FOLLOWED? AND IF NOT,  
WHY NOT?

GSA intended to use the A-109 exception that provides for the pursuit of a noncompetitively selected system concept if justified by factors, such as urgency of need or by the physical and financial impracticability of demonstrating alternatives, and when authorized by the agency head. However, we

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<sup>1/</sup>The principal factors that establish termination liability are the (1) net change--installations and removals--in the number of main stations on each system during a given period and (2) termination liability period on each system.

believe that GSA's planned use of A-109's exception provision was not justified principally because GSA had not adequately demonstrated urgency of need (e.g., the critical time frame in which the interim system was needed). GSA's planned position, its rationale, and our views for the time frame are as follow:

GSA's position--Requirements identified by 27 agencies for meeting mission responsibilities need to be or must be satisfied at the earliest practicable date.

GSA's rationale--GSA is receiving continuously increasing pressure from certain agencies for permission to leave its present consolidated system. Seven agencies have already identified requirements needed to meet their mission responsibilities, which cannot be met by GSA's present system, and have obtained their own enhanced systems.

GAO's view--GSA did not obtain information concerning each office's needs or a time frame to satisfy these needs. The fact that fewer than 27 agencies were willing to participate in the interim system if costs escalated 10 percent above their current systems indicates some uncertainty about the requirements.

HAS THERE BEEN ANY COMPETITION  
FOR THIS CONTRACT?

GSA made no specific inquiries to the telecommunications industry to determine its interest and ability, either as a single entity or joint venture effort, in supplying GSA's needs. As previously noted, GSA dealt with the serving telephone company.

AGENCY COMMENTS AND OUR EVALUATION

We furnished a draft of this report to OMB, NTIA, and GSA officials and received their comments. Because the comments were too voluminous, we have not included them in the report. Instead, we have summarized the agencies' comments on the following pages.

OMB comments

OMB believed that the inquiries and information described in our draft report were helpful. OMB pointed out that its letter of inquiry--as an external source--contributed to GSA's decision to terminate the system. It suggested expanding certain areas to improve the clarity of the report. We have incorporated these changes where they amplify the presentation.

NTIA comments

NTIA generally agreed with our draft report. NTIA pointed out that GSA commented on the possibility that dissatisfaction with GSA's management was a contributing factor for agencies establishing separate systems. Although GSA was considering possible changes in administrative procedures, these were not included in its evaluation of the interim system. Whether or not the interim system had been installed, we believe that dissatisfaction with telecommunications management should be expeditiously resolved within the executive branch because it should not be permitted to deter the Government from maximizing its use of current technology to achieve the most cost-effective telecommunications.

We have not addressed NTIA's other points because the information was already presented in our draft report.

GSA comments

GSA generally agreed with our draft report. However, it took different views on certain matters in the report.

GSA believed that agencies' needs would be met by the interim system. We believe that organization-wide needs would be sufficient for preliminary study purposes. However, we believe that, before starting any procurement actions, a detailed study that determines user needs is necessary because the cost-effective application of current technology permits the selection of certain services by user or groups of users to match their needs.

GSA stated that employee training costs should be excluded from the cost analyses because the telephone company proposed to provide training without additional cost to the Government, and employee training costs ultimately would be incurred. We disagree. Instructional training sessions were expected to last less than 1 hour, but we believe that training for all Federal

employees--with possible exception of those using currently installed enhanced systems that are similar to the interim system--would be necessary to maximize the effective use of the new system. These employees would perform their normal duties if not diverted for training. Therefore, we believe that training costs for a program of this magnitude should have been included in the estimated costs for the interim system.

GSA stated that the potential existed for eliminating termination liabilities when converting to the follow-on system. Also, GSA stated that its limited study showed a lesser termination liability for the interim system than for the existing system. We recognize that management may take steps to minimize or eliminate termination liabilities, regardless of the system, because it depends primarily on duration of the liability period, system growth, and rate of conversion. Due to the uncertainty of the conversion rate for the follow-on system and regardless of whether the existing or interim system result in lower termination liabilities to the Government, we believe a more conservative view should be taken by including this liability in the economic analyses. Also, GSA demonstrated the potential magnitude of this factor when it estimated the annual liability for terminating the entire system annually over several years for one interim system alternative. This showed estimated termination liability after conversion ranging from \$11.8 million in 1983 to \$3.2 million in 1985, and thereafter, the liability increased due to system growth.

GSA suggested that we expand certain areas of the report to improve its clarity. We have incorporated these suggestions where they amplify the presentation.

We believe that consolidating local telephone systems can be in the Government's best interest as evidenced by our prior report, "Economic And Operational Benefits In Local Telephone Services Can Be Achieved Through Government-Wide Coordination" (LCD-80-9, Nov. 14, 1979). We also believe that a detailed study must be completed before proceeding with a competitive procurement. Such a study should compensate for those limitations addressed in the preceding paragraphs.

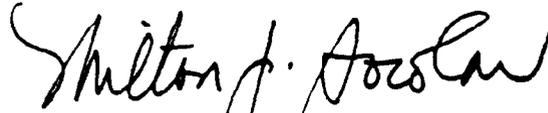
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As arranged with your office, we plan no further distribution of this report until 30 days from the date of the report.

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This report has been based on information obtained from GSA, the serving telephone company, other telephone equipment suppliers, and other Government organizations.

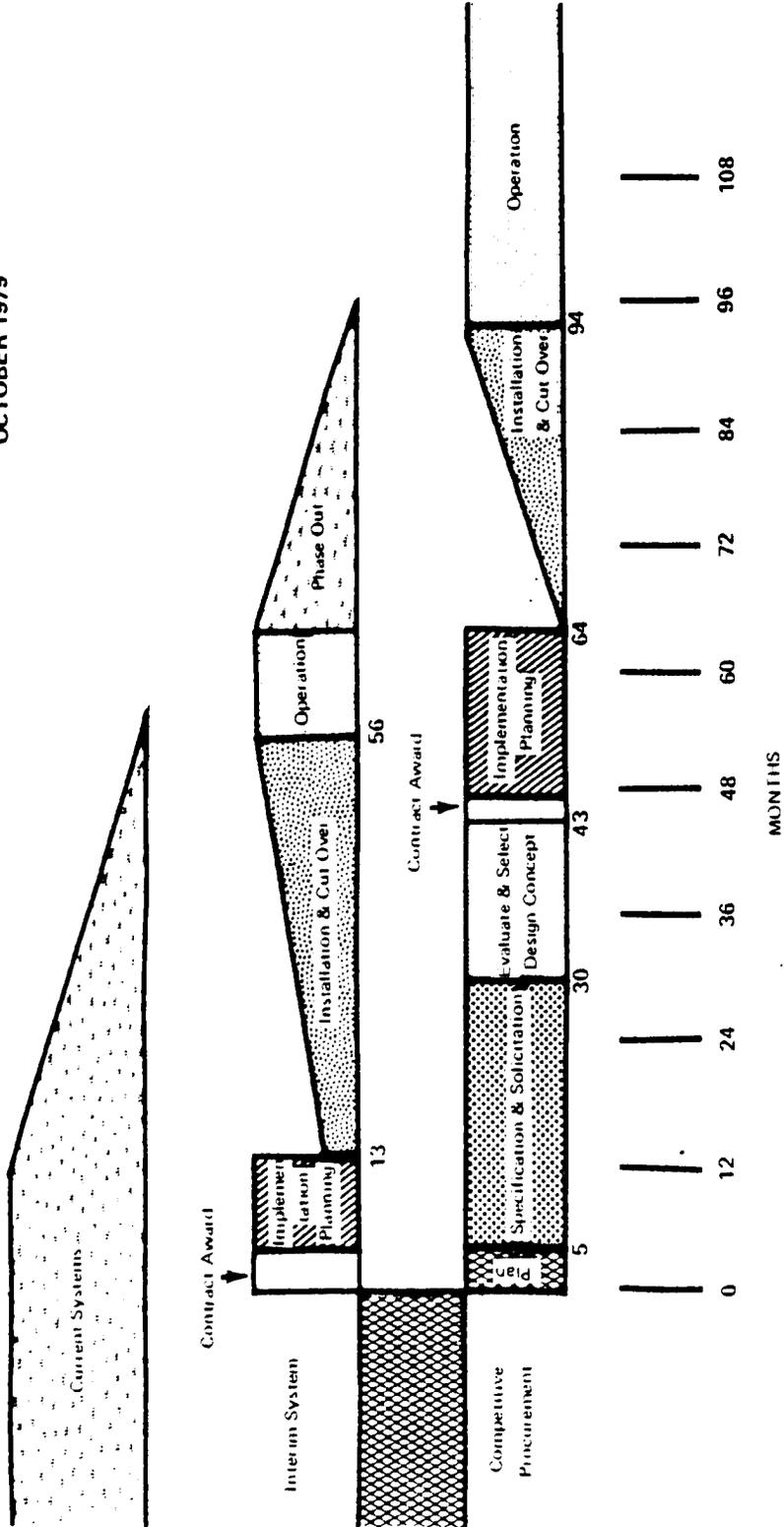
Sincerely yours,

A handwritten signature in cursive script, reading "Milton J. Jozlaw". The signature is written in dark ink and is positioned above the typed name and title.

Acting Comptroller General  
of the United States

Enclosures - 4

OCTOBER 1979



WASHINGTON TELEPHONE SERVICES, CURRENT, INTERIM, & COMPETITIVE

# COST COMPARISON OF THE EXISTING AND INTERIM LOCAL TELEPHONE SYSTEMS (In 1978 Constant Dollars)

## Estimated Annual Operating Costs (Millions) Interim System

## Cost Difference Between Existing Systems And Interim System

Calendar Year	Existing Systems		25% Single-Line/70% Main Stations		50% Single-Line/70% Main Stations		75% Single-Line/77% Main Stations		25% Single-Line/70% Main Stations		50% Single-Line/70% Main Stations		75% Single-Line/77% Main Stations	
	Existing Systems	Interim System	Existing Systems	Interim System	Existing Systems	Interim System	Existing Systems	Interim System	Existing Systems	Interim System	Existing Systems	Interim System	Existing Systems	Interim System
1980	\$ 42.6	\$ 31.9	\$ 41.8	\$ 31.9	\$ 41.0	\$ 31.9	\$ 40.4	\$ 31.9	\$ 8	\$ 8	\$ 1.6	\$ 8	\$ 2.2	\$ 2.2
1981	46.1	24.4	45.2	24.4	43.5	24.4	42.3	24.4	9	9	2.6	9	3.0	3.0
1982	47.8	15.4	47.9	15.4	45.2	15.4	43.2	15.4	-1	-1	2.7	-1	4.8	4.8
1983	50.3	5.7	50.9	5.7	46.9	5.7	44.0	5.7	-6	-6	3.4	-6	8.3	8.3
1984	53.0	-	53.1	-	48.3	-	44.8	-	-1	-1	4.7	-1	8.2	8.2
1985	55.1	-	54.8	-	49.7	-	46.1	-	3	3	5.4	3	9.0	9.0
1986	57.3	-	56.6	-	51.2	-	47.3	-	7	7	6.1	7	10.0	10.0
1987	59.6	-	58.7	-	53.1	-	49.0	-	9	9	6.5	9	10.6	10.6
1988	61.9	-	61.0	-	55.2	-	51.0	-	9	9	6.7	9	10.9	10.9
1989	64.4	-	63.5	-	57.4	-	53.0	-	9	9	7.0	9	11.4	11.4
<b>TOTAL</b>	<b>\$538.1</b>	<b>\$77.4</b>	<b>\$531.5</b>	<b>\$77.4</b>	<b>\$491.5</b>	<b>\$77.4</b>	<b>\$461.1</b>	<b>\$77.4</b>	<b>\$46.7</b>	<b>\$46.7</b>	<b>\$46.7</b>	<b>\$46.7</b>	<b>\$77.0</b>	<b>\$77.0</b>

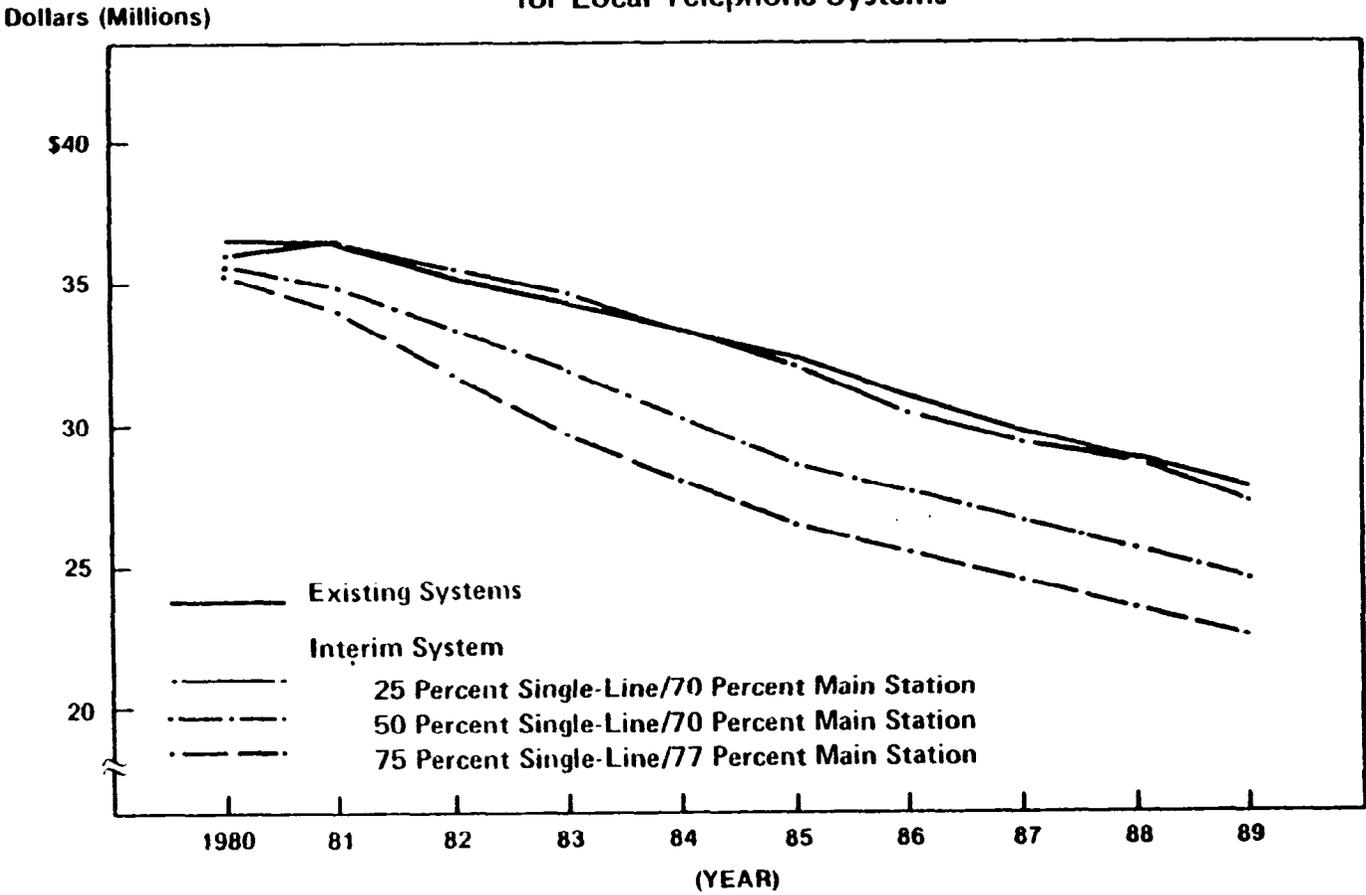
# COMPARISON OF THE ADJUSTED ANNUAL COSTS BETWEEN THE EXISTING AND INTERIM LOCAL TELEPHONE SYSTEMS AS RECOMPUTED BY GAO

## Estimated Annual Operating Costs (Millions) Interim System

## Cost Difference Between Existing Systems And Interim System

Calendar Year	Existing Systems	25% Single-Line/ 70% Main Stations			50% Single-Line/ 70% Main Stations			75% Single-Line/ 77% Main Stations			25% Single-Line/ 70% Main Stations			50% Single-Line/ 70% Main Stations			75% Single-Line/ 77% Main Stations																								
		Installation and Conversion Costs	Annual Operating Costs	Total	Installation and Conversion Costs	Annual Operating Costs	Total	Installation and Conversion Costs	Annual Operating Costs	Total	Installation and Conversion Costs	Annual Operating Costs	Total	Installation and Conversion Costs	Annual Operating Costs	Total	Installation and Conversion Costs	Annual Operating Costs	Total																						
																				Installation and Conversion Costs	Annual Operating Costs	Total	Installation and Conversion Costs	Annual Operating Costs	Total	Installation and Conversion Costs	Annual Operating Costs	Total													
<b>UNDISCOUNTED COSTS:</b>																																									
1980	\$ 42.6	\$ .3	\$ 41.7	\$ 42.0	\$ .6	\$ 40.8	\$ 41.4	\$ 1.0	\$ 40.1	41.1	\$ .6	\$ 1.2	\$ 1.5	1981	46.1	1.0	44.8	45.8	1.2	42.9	44.1	1.4	41.5	42.9	.3	2.0	3.2														
1982	47.8	1.1	47.1	48.2	1.2	44.1	45.3	1.5	41.9	43.4	-.4	2.5	4.4	1983	50.3	1.1	49.7	50.8	1.3	45.5	46.8	1.5	42.5	44.0	-.5	3.5	6.3	1984	53.0	.7	52.1	52.8	.7	47.2	47.9	.9	43.6	44.5	.2	5.1	8.5
1985	55.1	-	54.3	54.3	-	49.1	49.1	-	45.3	45.3	.8	6.0	9.8	1986	57.3	-	56.4	56.4	-	51.1	51.1	-	47.1	47.1	.9	6.2	10.2	1987	59.6	-	58.7	58.7	-	53.1	53.1	-	49.0	49.0	.9	6.5	10.6
1988	61.9	-	61.0	61.0	-	55.2	55.2	-	51.0	51.0	.9	6.7	10.9	1989	64.4	-	63.5	63.5	-	57.4	57.4	-	53.0	53.0	.9	7.0	11.4														
<b>Total</b>	<b>\$538.1</b>	<b>\$4.2</b>	<b>\$529.3</b>	<b>\$533.5</b>	<b>\$5.0</b>	<b>\$486.4</b>	<b>\$491.4</b>	<b>\$6.3</b>	<b>\$455.8</b>	<b>\$481.3</b>	<b>\$4.6</b>	<b>\$46.7</b>	<b>\$76.8</b>																												
<b>DISCOUNTED COSTS:</b>																																									
1980	\$ 36.5	\$ .2	\$ 35.8	\$ 36.0	\$ .5	\$ 35.0	\$ 35.5	\$ .8	\$ 34.4	\$ 35.2	\$ .5	\$ 1.0	\$ 1.3	1981	36.6	.7	35.6	36.3	.9	34.0	34.9	1.1	32.9	34.0	.3	1.7	2.0														
1982	35.1	.8	34.6	35.4	.9	32.4	33.3	1.1	30.8	31.9	-.3	1.8	3.2	1983	34.2	.8	33.8	34.6	.9	31.0	31.9	1.0	28.9	29.9	-.4	2.3	4.3														
1984	33.4	.4	32.9	33.3	.5	29.7	30.2	.6	27.4	28.0	.1	3.2	5.4	1985	32.1	-	31.7	31.7	-	28.6	28.6	-	26.5	26.5	.4	3.5	5.6														
1986	30.9	-	30.5	30.5	-	27.6	27.6	-	25.5	25.5	.4	3.3	5.4	1987	29.8	-	29.4	29.4	-	26.6	26.6	-	24.5	24.5	.4	3.2	5.3														
1988	29.7	-	28.3	28.3	-	25.6	25.6	-	23.6	23.6	.4	3.1	5.1	1989	27.6	-	27.2	27.2	-	24.6	24.6	-	22.7	22.7	.4	3.0	4.9														
<b>Total</b>	<b>\$324.9</b>	<b>\$2.9</b>	<b>\$319.8</b>	<b>\$322.7</b>	<b>\$3.7</b>	<b>\$295.1</b>	<b>\$298.8</b>	<b>\$4.6</b>	<b>\$277.2</b>	<b>\$281.8</b>	<b>\$2.2</b>	<b>\$26.1</b>	<b>\$43.1</b>																												

### Estimated Annual Discounted Operating Costs for Local Telephone Systems



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